## EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

**PUBLICATION NUMBER** 

63013390

**PUBLICATION DATE** 

20-01-88

APPLICATION DATE

03-07-86

APPLICATION NUMBER

61157658

APPLICANT: OMRON TATEISI ELECTRONICS CO;

INVENTOR: NAKATSUKA NOBUO;

INT.CL.

: H01S 3/133 G01S 7/48

TITLE

: STABILIZED LIGHT SOURCE DEVICE

ABSTRACT :

PURPOSE: To stabilize the intensity of an optical output by directly monitoring front light in output light from a semiconductor laser and controlling the intensity of the optical output.

CONSTITUTION: A beam splitter 4 is arranged in the forward direction that output light (front light) from a semiconductor laser 1 is projected, and one part of incident light to the beam splitter 4 is branched and the branched light is received by a photodiode 5 for monitor. A light intensity signal corresponding to the quantity of light reception is generated by the photodiode 5 and the signal is outputted to an automatic output control circuit 3, and driving currents given to the semiconductor laser 1 are controlled automatically so that the light intensity signal is kept constant by the automatic output control circuit 3. A polarizer 6 is inserted on P-polarized branch, thus stabilizing the light intensity of the semiconductor laser 1 with high precision.

COPYRIGHT: (C)1988, JPO& Japio